Craighead Environmental Research Institute

Monthly Progress Report: October, 2008

for the Montana Department of Transportation and Western Transportation Institute

Bozeman Pass Wildlife Monitoring MSU banner number 426899

1 October 2008 – 31 October 2008

Task 1: Road Kill Surveys during October 2008

Road kill surveys were conducted between Bozeman and Jackson Creek. Surveys were conducted on both sides of I-90 from Bozeman to Jackson Creek and back for a total of 22 miles round trip and an estimated 1 hour of labor per survey. Fifteen (15) road-kill surveys were driven during October of 2008. Three (3) of those recorded no new road-kill. This equals 330 miles driven in October for this subcontract. Totals of animals killed between Bozeman and Livingston were:

Bozeman Pass Roadkill Totals	October
Species	Number
Badger	0
Beaver	0
Bobcat	0
Bird Spp.	0
Black Bear	0
Cowbird	0
Coyote	0
Crow	1
Deer species	2
Dog	0
Domestic cat	2
Elk	0
Great Horned Owl	1
Ground Squirrel	0
Harrier	0
Hungarian (Gray) Partridge	0
Long-eared Owl	0
Magpie	1
Mallard	0

Marmot	0
Meadowlark	0
Mink	0
Moose	0
Mule Deer	1
Pigeon	0
Porcupine	0
Rabbit	0
Raven	0
Raccoon	4
Red Fox	0
Ruffed Grouse	0
Snowshoe Hare	1
Skunk	3
Small mammal spp.	0
Weasel	0
White Tail Deer	10

Task 2: Track bed monitoring at the MRL Bridge in October 2008

Two track bed sessions were completed in October. The majority of large animal tracks were deer. Track bed use (and underpass crossings) seemed to have remained high in October. Deer crossings per day during the first session were 4, 37, 1, and 5. Crossings per day during the second session were 18, 13, 10, and 6. A moose crossed the track bed once during each session; and moose tracks were present on the track bed between the sessions.

Task 3: Photo monitoring at fence ends through October 2008

Cameras were downloaded once in October on Oct. 31. Batteries for these fence-end remote cameras were operational. No large animal occurrences photographed in October at the SE fence end: one rabbit was photographed. At the NE fence end: no large animals were recorded. A mouse was photographed. The camera mounted under the bridge over Bear Canyon road at the western fence end under the I-90 bridge was not downloaded on 31 October.

Task 4: Photo monitoring at jump-outs through October 2008

Cameras were downloaded in October on Oct. 22. One black bear was photographed at the top of the NE jumpout on 7 October but it exited the fence somewhere else. Three raccoons were recorded. We recorded several birds: about 21 robins, 5 magpies, and 1 pigeon. Occasionally a horse in the pasture below was photographed. A whitetail deer was photographed at the NW jumpout on 13 October but it exited the fence somewhere else. 10 ravens were also recorded. A black bear was photographed at the bottom of the SE jumpout on 4 October. 2 rabbits, 3 magpies, 1 robin, 3 raccoons, and 1 thrush were photographed. No animals at all were photographed

at the SW jumpout. We set the sensitivity to medium which is sufficient so that vehicles do not trigger the camera, but sensitive enough that it records CERI personnel when they check the track bed.

Task 5: Track bed monitoring at fence ends, jump-outs through October 2008

Monitoring of fence ends and jump-outs continued through October with no records of animals exiting through the jump-outs. Deer tracks were found in fresh snow on the top of the NW jumpout on 20 October when a track bed session began which corresponded to the photos taken on 13 October. Although a black bear was photographed at the top of the NE jumpout on 7 October, no tracks were found on the track bed there the next day. It appears that the bear stayed off of the sand track bed as it walked up to the edge of the jumpout and looked over.

Task 6: Photo monitoring of culverts October 2008

High water and debris created a blockage across the east culvert that may have impeded travel by animals somewhat. We cleared a path on September 9. The east culvert camera was downloaded on September 12.

Task 7: Opportunistic snow tracking at track bed, fence ends, jump-outs, and along the Interstate in October 2008.

We are not conducting snow tracking at the track bed, fence ends and jump-outs until winter.

Task 8: Data Management & Reporting in October 2008

Data entry and summary required two hours during October.

Discussion:

We will leave the parallel cameras at the fence ends to further judge their performance until winter. During October both cameras at each site recorded the same large animals. In preparation for winter we purchased some utility boxes and modified them to house the WTI cameras. Two of these were deployed at the jumpouts in September. Two more were installed at the fence ends in October.

An invoice was submitted with this report for October expenses and activities. Currently the cumulative total billed to this project is \$25,901.48.